



USDA Foreign Agricultural Service

# GAIN Report

Global Agriculture Information Network

Template Version 2.09

Voluntary Report - public distribution

**Date:** 7/6/2005

**GAIN Report Number:** CH5054

## China, Peoples Republic of

### FAIRS Product Specific

### National Standards for Organic Products

### 2005

**Approved by:**

Maurice House  
U.S. Embassy Beijing, Office of Agricultural Affairs

**Prepared by:**

Wu Bugang

---

**Report Highlights:**

This an UNOFFICIAL translation of the national standards for organic products issued by the Standardization Administration of China. It consists of four parts, namely production, processing, labeling and marketing, and management system. Exporters should carefully study the regulation and consult with importers to ensure that their interpretation of this regulation is accurate.

---

Includes PSD Changes: No  
Includes Trade Matrix: No  
Unscheduled Report  
Beijing [CH1]  
[CH]

## Table of Contents

<b>Executive Summary .....</b>	<b>3</b>
<b>Organic products — Part 1: Production .....</b>	<b>3</b>
Annex A.....	20
Substances allowed for use in soil fertility buildup and improvement in organic crop plantation .....	20
Annex B.....	22
Substances and measures allowed for use in plant protection in organic crop plantation..	22
Annex C.....	24
Drinking water quality requirements for organic livestock and poultry, and sterilizing agents allowable for organic livestock and poultry farms .....	24
Annex D .....	26
Criteria in evaluation of other substances used in organic production.....	26
<b>Organic Product Part 2: Processing .....</b>	<b>29</b>
Annex A.....	34
Non-agricultural origin ingredients and additives allowed to use in organic food processing .....	34
Annex B.....	38
Criteria of evaluation for organic food additives and processing aids .....	38
<b>Organic products — Part 3 : Labeling and marketing .....</b>	<b>40</b>
<b>Organic Product Part 4: Management System.....</b>	<b>45</b>

## Executive Summary

The Standardization Administration of China (SAC) and the General Administration on Quality Supervision, Inspection and Quarantine (AQSIQ) jointly issued the National Standards for Organic Products early this year. These recommended standards, along with other regulations about organic product certification (CH5012 and CH5049) regulate the production, processing, labeling and marketing, and management of organic products in China. Imported organic products need to observe these regulations and standards that were put into force on April 1, 2005.

## Organic products – Part 1: Production (GB/T19630.1)

### Foreword

GB/T 19630 "Organic Product" is divided into four parts:

- Part 1: Production;
- Part 2: Processing;
- Part 3: Labeling and marketing;
- Part 4: Management system.

This part is Part 1 of GB/T 19630.

Annex A, Annex B and Annex C of this Part are normative and Annex D is informative.

This part was proposed by Certification and Accreditation Administration of China.

This part was drafted by: China Agriculture University, Nanjing Guohuan Organic Product Certification Center, China Qualification Appraisal National Accreditation Center.

This part was mainly drafted by: Du Xiangge, Zhou Zejiang, Wang Yun'gang, Wang Maohua, Chen Yunhua and Xu Na.

### 1. Scope

This part of GB/T 19630 specifies the general specifications and requirements for organic production of crops, edible fungi, wild plants, domestic animals and poultry, aquatic products, bee and its unprocessed products.

This part is applicable to the overall process of organic production, mainly including: growing of crops, cultivation of edible fungi, wild plant collection, domestic animals and poultry breeding, aquatic farming, bee breeding and the transport, storage and package of their products.

### 2. Normative reference documents

The following standards contain provisions that, through reference in this part of GB/T 19630, constitute provisions of this part. Any modification lists (except text corrections) or revisions of the reference documents with specific date shall not apply to this part. But, all parties of agreement based on this part are encouraged to discuss if the newer versions of those documents are applicable. All the latest editions of the referenced documents without date indication are applicable to this part.

GB 3095-1996 Ambient Air Quality Standard

GB 5084 Standards for irrigation water quality

GB 5749 Sanitary standard for drinking water

GB 9137 Maximum allowable concentration of pollutants in atmosphere for protection crops

GB 11607 Water quality standard for fisheries

GB 15618-1995 Environmental quality standard for soils  
GB 18596 Discharge standard of pollutants for livestock and poultry breeding

### 3. Terms and definitions

The following terms and definitions apply to this part of GB/T 19630.

#### 3.1 Organic agriculture

A kind of agricultural production in compliance with certain organic agriculture production standards, to obtain organisms and their products without using genetic engineering technology, chemosynthetic pesticide, chemical fertilizer, growth regulator or feed additive, following natural laws and ecologic principles, coordinating the balance of crop farming and livestock breeding, and adopting a series of agricultural technology for sustainable development to maintain continuous and stable agricultural production system.

#### 3.2 Organic product

Products for human consumption or animal feeding made through production, processing and marketing conforming to this part.

#### 3.3 Conventional

The production system and their products have not obtained organic certification or have not start for organic conversion certification.

#### 3.4 Conversion

The period of time from the starting of management according to this part to the production unit and products obtaining organic certification.

#### 3.5 Parallel production

Parallel production refers to the situation in which the identical or hard-to-be distinguished organic, organic conversion or conventional products are produced simultaneously in the same farm.

#### 3.6 Buffer zone

The transition zone between organic and conventional land blocks purposefully set with explicit borders to restrain or obstruct the drifting of objectionable substances from adjacent land blocks.

#### 3.7 Input

All substances or materials used in organic production.

#### 3.8 Homeopathic treatment

A kind of diseases treatment system by using the dilution of some substances that, when being applied massively without dilution to healthy animals, can cause the diseases to be treated.

#### 3.9 Biological diversity

Diversity of life forms and ecosystem types on the earth, including genetic diversity, species diversity and ecological system diversity.

#### 3.10 GMOs

Plants, animals and microorganisms introduced with some genes through genetic engineering.

#### 3.11 Allowed,permitted

Substances or methods allowed to be used by this part.

#### 3.12 Restricted

Substances or methods allowable for conditional use by this part.

#### 3.13 Prohibited

Substances or methods not allowed to be used by this part.

### 4 Growing of crops

#### 4.1 Generals

##### 4.1.1 Scope of farm

The farm shall have legible boundary and explicit property and management rights. It can be multiple farmers working in the same area and all of them are willing to carry out the production according to this part, with a strict organization and management system established.

#### 4.1.2 Production environment requirements

Organic production shall be carried out in appropriate environmental conditions. An organic production base shall be far away from urban area, industrial and mining area, traffic trunk lines, industrial pollution sources and domestic refuse ground, etc.

The environmental quality of the production base shall conform to the following requirements:

- a. Soil environment quality shall conform to Class 2 standard of GB 15618-1995.
- b. Quality of irrigation water shall conform to GB 5084.
- c. Environmental air quality shall conform to Class 2 standard in GB 3095-1996 and GB 9137.

#### 4.1.3 Buffer zone and habitat

In case that the organic production area of the farm is subject to pollution from adjacent conventional production areas, buffer zones physical barriers shall be provided between the organic production area and conventional production area, so as to protect the organic production against pollution and prevent the objectionable substances in the conventional land from drifting.

Habitat of natural enemies shall be arranged around the organic production area to provide space for activities, oviposition and inhabitation, so as to improve biotic diversity and natural control capability.

#### 4.1.4 Conversion period

Conversion period shall be calculated starting from the date of submitting the application for certification. The conversion period shall be normally not less than 24 months for annual crops and not less than 36 months for perennial crops.

The conversion period of farmlands that are newly cultivated, long-term abandoned, long-term cultivated in traditional ways by using no objectionable substances and supported by sufficient evidences shall also be at least 12 months.

During the conversion period, the farm shall be managed fully according to the requirements for organic agriculture.

#### 4.1.5 Parallel production

In case that parallel production exists in a farm, the varieties of animals and plants for parallel production shall be specified with plans for the parallel production, harvest, storage and transport, accompanied with independent and complete records system for organic products and conventional products (or organic conversion products), respectively.

Organic production management can be carried out in the entire farm or in a part of it before realizing full organic production as scheduled.

#### 4.1.6 Genetically modified organism

Genetically modified organisms and their derivants shall be prohibited to be introduced into the organic production system or organic products, including plants, animals, seeds, composition divisions, reproduction materials, fertilizers, soil improvement substances, plant protection products and other agricultural input substances. Genetically modified organisms shall not be introduced or used in the conventional production part of farm with parallel production.

### 4.2 Growing of crops

#### 4.2.1 Selection of seeds and seedlings

Organic seeds or seedlings shall be selected. If no organic seeds or seedlings are available, conventional seeds or seedlings not treated with objectionable substances shall be selected, but plans for obtaining organic seeds and seedlings shall be made.

The kind and variety of crops selected shall be suitable to the local soil and climate features with resistance against disease and pests. The protection of inherent diversity of crops shall be fully considered in variety selection.

Use of seeds and seedlings treated with objectionable substance and method are prohibited.

#### 4.2.2 Crop cultivation

Crop rotation and interplanting shall be adopted to maintain biotic diversity and soil fertility in the area.

In areas of one crop a year, two kinds of crops are allowable for rotation.

It is prohibited to grow the same crop in the same field for multiple years, except pasture, paddy rice and perennial crops.

Soil moisture shall be controlled with reasonable irrigation mode according to local circumstances (such as trickling irrigation, sprinkler irrigation or subsurface irrigation, etc.).

Restoration of soil fertility shall be carried out with bean crops, zero tillage or land fallow.

#### 4.2.3 Soil fertility management

Soil nutrients and organic matters shall be recovered, regenerated and supplemented to replenish the loss due to crop harvest.

Adequate organic fertilizers shall be used to maintain and improve soil fertility, nutrient balance and activity of soil organisms.

Organic fertilizers shall be mainly originated from the farm or organic farms (or livestock farm); for particular cases (such as in intensive cultivation mode) or in organic conversion period or for special nutrient requirements as verified, a part of fertilizer can be bought from outside of the farm with approval by the certification authorities. Commercial organic fertilizers shall be approved by organic certification authorities.

Human excrement shall be restricted for use. When necessary, adequate maturity and harmless treatment shall be carried out according to related requirements and it shall not contact the edible part of the crop. Application for leaf vegetables, tubers and root crops shall be prohibited.

Natural mineral fertilizers and bio-fertilizers shall not be used as substitutes in system nutrient cycle and can only be used as controlled-release fertilizers with their own natural components. Chemical treatment for solubility enhancement shall be prohibited.

In composting of organic fertilizers, microorganisms from the nature can be added, but genetically modified organisms and their products are prohibited.

Refer to Annex A for substances allowable or restricted in use during soil fertility buildup. Before using any substance not listed in Annex A, evaluation shall be carried out by certification authorities according to Annex D.

In case of suspicious fertilizer pollution, test the fertilizer for heavy metal or other pollution factors before use. Application of mineral fertilizers shall be strictly controlled to prevent soil from heavy metal accumulation.

In case of suspicious fertilizer pollution, test the fertilizer for pollution factors before use.

Fertilizers passed the test shall be controlled in application amount to avoid harmful substance buildup in soil.

The use of chemical synthesis fertilizers and urban sewage sludge are prohibited.

#### 4.2.4 Plant diseases, insect pests and weeds control

The fundamental principles of diseases, pests and weeds control shall start from the entire ecological system and use various preventive measures to create environmental conditions adverse to the breeding of diseases, pests and weeds but favorable to their natural enemies, so as to maintain the balance of agricultural ecosystem and bio-diversity and reduce the loss caused by diseases, pests and weeds. Priority shall be given to agricultural measures to select varieties with good resistance against diseases and pests, make non-chemical seed treatment, rear sound seedlings, strengthen cultivation management, till soil for weed clearing and sunshine, and carry out crop rotation and interplant, to control diseases, pests and weeds. Measures of mechanical and manual pest capture by using light and color shall be used and mechanical and manual weeding shall be carried out to control diseases, pests and weeds.

In case of the failure to control the diseases and pests by using the above methods, substances listed in Annex B are allowed for use. Before using any substance not listed in Annex B, evaluation shall be carried out by certification authorities according to Annex D.

#### 4.2.5 Pollution control

The irrigation and drainage systems of organic land and conventional land shall be isolated effectively to prevent water moving from conventional farmland to organic farmland.

Equipment used in conventional agricultural system shall be adequately cleaned to remove pollutant residuals.

When using protective building covering, plastic film and fly net, only products made from polyethylene, polypropylene or polycarbonate are allowed for use and shall be removed from soil after use. Incineration or use of polychlor products is prohibited.

Pesticide residue on organic products shall not exceed the limit specified in national hygienic standards by 5% and the heavy metal content shall not exceed the limit specified in national hygienic standards for the corresponding products.

#### 4.2.6 Soil conservation and biotic diversity protection

Positive and feasible measures shall be taken to prevent soil from running away, desertification and water resource abuse. Sustainable utilization of soil and water resource shall be fully considered.

Definite and feasible measures shall be taken to prevent soil salinization.

Stalk coverage or interplant shall be encouraged to avoid soil exposure.

Protection of ecological environment and biotic diversity shall be highlighted.

Natural enemies and their habitats shall be protected.

Crop stalks shall be utilized and shall not be incinerated.

## 5 Edible fungi cultivation

### 5.1 Space and environment

An outdoor edible fungi cultivation area directly neighboring conventional farmland must be provided with a buffer zone of greater than 30m to avoid impacts of objectionable substances. No chemical synthesis pesticide shall be used around the cultivation space. Water quality of water source shall conform to GB 5749.

### 5.2 Strains

Certified organic strains shall be used and the source of strains shall be able for retrospection.

### 5.3 Cultivation

Organically produced or natural material media shall be adopted.

Soil used in edible fungi cultivation shall conform to the same requirements as for crop production.

Paint used on timber and inoculation position shall be of edible grade. Petroleum made paint, emulsion paint and oil paint are prohibited.

#### 5.4 Pests and infectious microbes

5.4.1 Preventive management measures shall be taken to maintain cleanness and air interchanges. Infected bacterioflora shall be removed.

5.4.2 In non-cultivation period, low concentration chlorine solution is allowed to use for sterilization of the cultivation space.

5.4.3 Physical barriers, temperature and humidity regulation and lime water are allowed to use for pest control.

### 6 Wild plant collection

6.1 The area for wild plant collection shall be clear with boundary and shall maintain in the status of stable and sustainable production.

6.2 The area for wild plant collection shall be free from pollution by any objectionable substance for three years before the collection.

6.3 Effective buffer zones shall be provided for the area of wild plant collection.

6.4 Collection activities shall not cause threat to the environment or the animals and plants species. The collection quantity shall not exceed the sustainable output of the ecological system.

6.5 Management plan for sustainable production of the area of wild plant collection shall be formulated and submitted.

### 7. General rules for transport, storage and package

#### 7.1 Transport

7.1.1 Before loading of organic products, the transport vehicles for miscellaneous use shall be cleaned.

7.1.2 Special marks and labels shall be attached to the transport vehicles and containers to distinguish from conventional products.

7.1.3 During transport and loading and unloading, the legible organic certification marks and related instructions shall be attached to external packing.

7.1.4 Complete records and bills shall be kept for transport, loading and unloading so as to maintain the integrality of organic production.

#### 7.2 Storage

Storehouse shall be clean and free from pests or harmful substances and shall have not been treated with any objectionable substance within 7 days.

Allowed using normal temperature storage, air regulation, temperature control, humidity control and other storage methods can be used.

Organic products shall be stored separately as far as possible. If stored together with conventional products, a special area shall be marked out in the storehouse and necessary packages and labels shall be used to guarantee that the organic products can be recognized from conventional products.

Complete storage records and bills shall be kept.

#### 7.3 Package

Packing materials shall conform to national hygienic requirements and related regulations. Renewable, recoverable and biodegradable packing materials shall be used.

Package shall be simple and practical.

Packages or containers in contact with objectionable substances are prohibited for use.

### 8 Livestock and poultry breeding

#### 8.1 Conversion period

8.1.1 The requirements of conversion period for feed production base are the same as that for organic farms.

The conversion period of pasture and meadow can be shorten to 12 months. For pasture and meadow never in contact with objectionable substances, the conversion period can be as short as 6 months.

8.1.2 Only after conversion period, can the livestock and poultry be sold as organic products. The conversion period of livestock and poultry are as follows:

- a. 12 months for meat cattle, horse and camel;
- b. 6 months for mutton sheep and hog;
- c. 6 months for milking livestock;
- d. 10 weeks for meat poultry;
- e. 6 weeks for egg poultry;
- f. The conversion period for other varieties shall be longer than 3/4 of their culture cycle.

## 8.2 Parallel production

If a farm grows the same variety or hard-to-differentiate varieties of livestock and poultry in organic mode and non-organic mode, it shall satisfy the following conditions before selling the organically cultured livestock and poultry as organic products:

- a. The pens, playgrounds and pastures for organic livestock and poultry and non-organic livestock and poultry shall be completely separated, or the organic livestock and poultry and non-organic livestock and poultry are varieties easy to differentiate;
- b. Storehouse or space for feed storage are separated with distinct marks;
- c. Detailed records are kept for organic and non-organic livestock and poultry in terms of grouping, feeding and medical treatment, etc.;
- d. Organic livestock and poultry shall not contact the storage area of non-organic feed and objectionable substances.

## 8.3 Introduction of livestock and poultry

8.3.1 Introduce organic livestock and poultry. If organic livestock and poultry are not available, conventional livestock and poultry are allowed to be introduced, provided the following conditions are satisfied:

- a. Beef cattle, equine and camel, ablated but not exceed 6 months old;
- b. Hog and sheep, ablated but not exceed 6 week old;
- c. Milking cows, not exceed 4 week old, colostrum fed and grown mainly on whole milk;
- d. Chicken broilers, not exceed 3 days old; (Other poultry can be 2 weeks old);
- e. Egg-laying chicken, not exceed 18 week old.

8.3.2 Conventional livestock shall be allowed for introduction with the quantity not exceeding 10% of gross amount of adult organic livestock of the same variety. In case of the following situations, the proportion can be up to 40% with the approval by certification authorities:

- a. Unpredictable serious natural disaster or human error accident;
- b. Cultivation farm expansion in a large magnitude;
- c. New livestock and poultry varieties introduced to the cultivation farm.

All introduced conventional livestock and poultry must go through corresponding conversion period.

8.3.3 Conventional studs shall be allowed for introduction and breeding immediately in organic way.

8.3.4 All introduced livestock and poultry shall not be polluted by genetically modified organisms and their products, including genetic engineering involved breeding materials, vaccine, animal medicines, feed and feed additives, etc..

#### 8.4 Feed

8.4.1 Livestock and poultry shall be fed with organic feed. 50% of the feed shall come from the plantation base of the cultivation farm or local organic farms with cooperation relationship with the farm. Feed production shall conform to the requirements of chapter 4 "growing of crops" in this part.

8.4.2 In the first year of organic management, the feed produced in the feed plantation base of the cultivation farm according to the standard requirements can be used for feeding the livestock and poultry of the cultivation farm but shall not be sold as organic feed.

8.4.3 In case of short supply of organic feed, conventional feed is allowed to be purchased. But the consumption of conventional feed shall not exceed the following percentage on yearly base:

- a. Herbivore (dry matter) 10%;
- b. Non-herbivore (dry matter) 15%.

The conventional feed in rations for livestock and poultry shall not exceed 25% of the gross amount (dry matter).

In case of unpredictable serious natural disaster or human error accident, conventional feed exceeding the above percentages is allowed for use for a certain period of time.

The prior approval of certification authorities shall be obtained before using conventional feed and detailed feeding records shall be kept.

8.4.4 Ruminants must be guaranteed to have roughage satisfying basic nutritional needs each day. In the rations, roughage, green feed or silage shall be not lower than 60% (or 50% for milking livestock in the first 3 months). Roughage, green feed or silage must be included in the rations for hog and poultry.

8.4.5 Pups in colostrum feeding period must be fed by females with sufficient colostrum. Organic milk is allowed for feeding pups in suckling period. In case that organic milk is unavailable, non-organic milk of the the same variety can be used.

Early stage ablactation or milk substitute feeding are prohibited. In emergency, milk substitute is allowed for supplementary feeding, provided it is free from antibiotic, chemical synthetic additive or products from animal slaughtering. Suckling period shall be at least:

- a. 6 weeks for hog and sheep;
- b. 3 months for cattle and horse.

8.4.6 Major farming materials in mixed feed must pass organic certification.

8.4.7 No genetically modified organisms or their products is permitted to use in feed, feed ingredients and feed additives.

8.4.8 The following methods and products are prohibited:

- a. Feeding ruminants with animals and their products, or feeding livestock and poultry with animals and their products of the same variety;
- b. Animal manure in any processed or unprocessed forms;
- c. Feeds extracted through chemical solvents or added with chemical synthetic substances.

#### 8.5 Feed additives

8.5.1 Feed additives used shall be those listed in the feed additive catalogue issued by the Ministry of Agriculture and conform to other requirements in this part.

8.5.2 Natural minerals and trace elements such as magnesia and greensand are allowed to use.

8.5.3 Vitamins added shall come from germinating grains, fish liver oil, yeast for wine making or other natural substances.

8.5.4 The following products are prohibited:

- a. Chemical synthetic growth promoters (including antibiotics, hormones and trace elements for growth promotion);
- b. Chemical synthetic appetizer;
- c. Preservatives (except for processing as accessory ingredient);
- d. Chemical synthetic pigment;
- e. Non-protein nitrogen (such as urea);
- f. Chemically purified amino acid;
- g. Genetically modified organisms or their products.

#### 8.6 Feeding conditions

8.6.1 The feeding environment of livestock and poultry (sheds and fences, etc.) must satisfy the following conditions, to meet their physiologic and behavior needs:

- a. Adequate activity space and time; part of the playground can be shaded;
- b. Well ventilated with abundant natural lighting, but avoiding excessive sunshine;
- c. Maintaining proper temperature and humidity, and protected against the invasion of weather stress such as: wind, rain and snow;
- d. Adequate padding materials;
- e. Adequate drinking water and feed;
- f. Using no building materials or equipment obviously harmful to human and animal health.

8.6.2 Quality of drinking water for livestock and poultry shall conform to the requirements in chapter C.1.

8.6.3 Artificial illumination can be used for egg poultry to extend lighting time, but the total lighting time shall not exceed 16h per day.

8.6.4 All livestock and poultry shall be allowed for outdoor movements in proper seasons, with exceptions as follows:

- a. Special shed structure prevent such outdoor movement temporarily. Improvements must be made within a time limit;

- b. Stable breeding is better for continuous utilization of land resources.

8.6.5 Cage rearing that keeps livestock or poultry away from contacting ground, full stable breeding, rearing in confinement or other feeding modes that restrain the natural behaviors of livestock and poultry shall be prohibited.

8.6.6 Gregarious livestock and poultry shall not be kept in a single room, except the diseased, adult male, or those in late pregnancy.

8.6.7 Necessary protection measures shall be taken to avoid injury by wild predators.

8.6.8 Forced feeding shall be prohibited.

#### 8.7 Disease control

8.7.1 Disease prevention for organic livestock and poultry shall be carried out on the following principles:

- a. Varieties strong in adaptability and hardiness shall be selected according to regional characteristics;

- b. According to the needs of livestock and poultry, the feeding and management methods of rotation grazing, high quality feed and suitable movements shall be provided to improve the non-specific immunity of the livestock and poultry;

- c. Feeding density shall be reasonably controlled to prevent health problems caused by excessive density.

8.7.2 Disinfecting agents listed in Annex C are allowed to use in livestock and poultry feeding places. Rodenticides with state approval and substances in Annex B are allowed to use in ways absolutely safe to livestock and poultry in feeding spaces.

8.7.3 During sterilization process, livestock and poultry shall be removed from the processing area. Excrements shall be cleaned regularly.

8.7.4 Natural therapies can be used for diseases treatment, such as Chinese veterinary medicine, acupuncture, plant sourced pharmaceuticals and homeopathy, etc.

8.7.5 Legal preventive vaccination shall be carried out.

In case that there are danger of diseases and no other controls are available, emergency preventive vaccination is allowed (including vaccination for promoting antibody generation in source of parents). But the vaccine used in the vaccination shall not be genetically modified.

Antibiotic or chemical synthetic animal medicines are prohibited to use in prophylactic treatment for livestock and poultry.

8.7.6 In case of failure in control of diseases by taking multiple preventive measures, conventional animal medicines are allowed to use for sick livestock and poultry under the guidance of veterinarians. The livestock and poultry and their products can be sold as organic products only after two times of the withholding period of the medicine (or after 48h, if the twice withholding period is shorter than 48h).

8.7.7 Antibiotic, chemical synthetic antiparasitic agent or other growth promoters are prohibited to use for stimulating growth of livestock and poultry. The use of hormone to controlled reproductive behaviors of livestock and poultry (e.g. estrus inducement, synchronous estrus and superovulation etc.) is prohibited. But hormone can be used for diseases treatment for individual animals under the supervision of veterinarians.

8.7.8 Except legal vaccine inoculation, livestock and poultry having a feeding cycle less than one year can only receive one treatment period of allopathic animal medicine; Livestock and poultry having a feeding cycle exceeding one year can receive max. three treatment periods of allopathic animal medicine each year. Otherwise, the livestock and poultry shall not be sold as organic livestock and poultry or organic products. If such livestock and poultry are to stay in the organic breeding system, a specified conversion period must be imposed with the consent by the certification authorities.

8.7.9 Records must be kept for diseases diagnostic result, medicine, dosage, dosing method and time, treatment period, nursing method and withholding period. Livestock and poultry and large-sized animals having received conventional animal medicine treatment shall be marked individually. Poultry and small sized animals can be marked in groups or batches.

8.8 Non-treatment surgery

8.8.1 Organic breeding emphasizes respect for individual animal characteristics. Varieties of those needing no non-treatment surgery shall be selected for breeding as far as possible. With the precondition of minimizing the painfulness of livestock and poultry, the following non-treatment surgeries are allowed, and anesthetics can be used when necessary:

- a. Physical castration (hog, cattle, chicken etc.);
- b. Horn cutting;
- c. Deciduous teeth passivating treatment for baby pigs in 24h after birth (to prevent sow breast injury);
- d. Lamb docking;
- e. Feather cutting;
- f. Ring wearing.

8.8.2 The following non-treatment surgeries are prohibited:

- a. Docking (except lamb);
- b. Beak or toe cutting;

- c.Wing ironing;
- d.Baby pig teeth cutting;
- e.Other non-treatment surgeries without definite permission.

## 8.9 Reproduction

8.9.1 Natural reproduction shall be encouraged.

8.9.2 Propagating methods having no serious impact to inheritance diversity, such as artificial insemination, are allowed.

8.9.3 The use of artificial or subsidiary reproduction techniques having serious impact to inheritance diversity, such as embryonic implantation and cloning, etc., are prohibited.

8.9.4 The use of hormone for promotion of ovulation and delivery is prohibited, except for purpose of therapy.

8.9.5 The offspring of female that received treatment with objectionable substances in the later one third section of gestation period shall not be certified as organic.

## 8.10 Transport and slaughtering

8.10.1 During loading and unloading, transport, waiting for slaughtering and slaughtering process, livestock and poultry shall be clearly marked for identification.

8.10.2 Special persons shall be appointed to manage the livestock and poultry during loading and unloading, transport and waiting for slaughtering.

8.10.3 Livestock and poultry shall be provided with proper conditions, such as:

- a.Livestock and poultry shall be prevented from contacting animals being slaughtered or dead through visual, hearing or smelling sense;
- b.Maintain the existing colonies and avoid mixture of different colonies or sexes;
- c.Provide breaking time for stress alleviation;
- d.Make sure the mode of transport and operating equipment are high quality and suitable for the purpose; The transport vehicles shall be suitable for the livestock and poultry to be transported;
- e.Avoid thirst and hunger during transport. Provide feed and water when necessary;
- f.Consider and try to satisfy individual needs of livestock and poultry;
- g.Provide proper temperature and relative humidity;
- h.Loading and unloading shall produce minimum stress to livestock and poultry.

8.10.4 Animal transport and slaughter shall be carried out with gentle operating stress. The use of electric baton and similar devices is prohibited for driving animals. Depressants or stimulants are prohibited to use for animals before and during transport.

8.10.5 Normally, the time of vehicle transport shall not exceed 8h, except the distance from the cultivation farm to slaughter house is too far. The nearest slaughter house shall be selected.

8.10.6 Binding, hanging and slaughtering before the livestock and poultry loss their consciousness are prohibited. The stunning tools shall be in good working order at any time. If, for religious or cultural reasons, livestock and poultry should be slaughtered directly without stunning, the process shall be as short as possible and carried out in a peaceful environment.

8.10.7 Organic livestock and poultry and conventional livestock and poultry shall be separated in slaughtering. The products after slaughtering shall be stored separately with legible marks. The colored marks on carcass must conform to national food hygienic regulations.

## 8.11 Environmental impacts

8.11.1 The amount of livestock and poultry in the farm shall not exceed the maximum stock capacity. The feed production capacity, animal health and environment impacts must be considered fully. Any adverse environmental effects caused by overgrazing may defy the certification.

8.11.2 Make sure the excrement storage facilities are sufficient in capacity, treated timely and used reasonably. All excrement storage and treatment facilities shall be designed and operated so that the underground and surface water is protected against pollution. The pollutant emission of the cultivation farm shall conform to GB 18596.

## 9 Aquatic farming

### 9.1 Conversion period

9.1.1 The conversion period from conventional breeding to organic breeding for cultivation farms with enclosed water bodies shall be at least 12 months. The conversion period shall be calculated starting from the date of submitting the application for certification by producer to certification authorities.

9.1.2 Different parts of a production unit in the same enclosed water body shall not be certified separately. Organic certification is obtainable only when the entire water body complies to the standards for organic certification.

9.1.3 If a production unit cannot carry out organic conversion simultaneously for all aquatic farming water bodies under its jurisdiction, a strict parallel production management system must be formulated. Such management system shall satisfy the following requirements:

a. Physical isolation measures must be taken between organic breeding units and conventional breeding units. The organic breeding area of fixed aquatic organisms must be kept away from conventional breeding area, conventional agricultural or industrial pollution with a certain distance.

b. Organic aquatic farming system, including water quality, feedstuff, medicine, input materials and other factors relating to standards shall be available for inspection by the certification authorities.

c. The documents and records of conventional production system and organic production system shall be established separately.

d. Converted organic cultivation farms shall carry out continuous organic management and shall not be shifted between organic and conventional management.

9.1.4 Wild sessile organisms in open water catching areas can be certified directly as organic aquatic products in the following conditions:

a. Water body is not affected by objectionable substances mentioned in this part. Water quality conforms to corresponding national standards;

b. Aquatic ecosystem is stable and sustainable;

c. Water quality, feedstuff, medicine dosage and other standard requirements of the water area can be checked.

9.1.5 Conventionally bred aquatic organisms are allowed to be introduced, but the certification is available only after a corresponding conversion period. When introducing non-native species, possible permanent damage to the local ecological system shall be avoided.

Introduction of genetically modified organism is prohibited.

9.1.6 All introduced aquatic organisms must be bred in organic mode at least for two third of the culture cycle.

### 9.2 Site selection of cultivation farm

9.2.1 In site selection for a cultivation farm, the balance of aquatic ecological environment of the cultivation farm and neighboring aquatic and terricolous ecological system shall be considered, together with maintaining of organism

diversity of local water area. Organic aquatic farm shall be free from adverse effects by pollution sources and conventional aquatic farms.

9.2.2 Breeding area and catching area must be defined clearly for convenient inspection of water quality, feedstuff, medicine and other factors.

### 9.3 Water quality

Water quality of organic aquatic farm must conform to GB 11607.

### 9.4 Artificial breeding

#### 9.4.1 Basic breeding requirements

9.4.1.1 Breeding method suitable to the physiologic habit of the objects and local conditions shall be adopted. Breeding techniques shall guarantee the health and satisfy the basic living needs of the breeding objects. Permanent aeration breeding shall be prohibited.

9.4.1.2 Effective measures must be taken to prevent aquatic organisms of other breeding systems from entering the organic cultivation farm, and prevent aquatic organisms of the organic cultivation farm from entering other breeding water bodies.

9.4.1.3 Any artificial injury measure to the breeding objects is prohibited.

9.4.1.4 Lighting time can be extended artificially. But the time of sunshine shall not exceed 16h.

9.4.1.5 Paint and chemical synthetic substances are prohibited to be used on building materials and production equipment for aquatic farming, to avoid nuisance to environment or organisms.

#### 9.4.2 Feedstuff

9.4.2.1 Feedstuff for organic aquatic products must be organic, wild or permitted by certification authorities. When the quantity or quality of organic or wild feedstuff cannot meet requirements, conventional feedstuff not exceeding 5% of total feedstuff amount (in dry matter) can be used. In case of unpredictable situations, conventional feedstuff not exceeding 20% of the annual feedstuff amount (in dry matter) can be used.

9.4.2.2 In feedstuff system, at least 50% of animal protein must be come from byproducts of food processing or other substances unfit for human consuming. In case of unpredictable situations, the proportion can be lowered to 30% for the year.

9.4.2.3 Natural mineral additives, vitamins and trace elements are allowed to use. Human excrement is prohibited to use. Direct use of animal manure without treatment is prohibited.

9.4.2.4 The following substances are prohibited to be added in feedstuff or provided to aquatic organisms in any way:

- a.Synthetic growth promoters;
- b.Synthetic phagostimulant;
- c.Synthetic antioxidant and preservative;
- d.Synthetic pigment;
- e.Non-protein nitrogen (such as urea);
- f.Organisms and their products of the same family as the breeding objects;
- g.Feedstuff extracted with chemical solvents;
- h.Chemically purified aminoacid;
- i.Genetically modified organisms or their products.

In special weather conditions, synthetic feedstuff preservatives are allowed to use, provided that prior approval is obtained from certification authorities, for the period and in the dosage as specified by certification authorities according to specific circumstances.

#### 9.4.3 Disease control

9.4.3.1 The health of breeding objects shall be guaranteed mainly through preventive measures (such as optimized management and feeding). All management measures shall be conducted to enhance disease resistance.

9.4.3.2 Breeding density shall be controlled so as to keep the health of aquatic organisms and prevent behavioral abnormality. Regular biologic density and water quality monitoring must be carried out.

9.4.3.3 Sterilization to breeding water body and pond bottom by using calcined lime, bleaching powder, tea seed cake and potassium permanganate is allowed to prevent aquatic organism diseases.

Antibiotic, chemical synthetic antiparasitic agent or other fishery medicines are prohibited to use for sterilization.

9.4.3.4 For diseased aquatic organisms, natural treatment shall be adopted in priority.

9.4.3.5 In case of failure of preventive measures and natural therapy, conventional fishery medicines are allowed to use for aquatic organisms. During conventional medication, the diseased organisms (aquatic products) must be isolated.

Aquatic organisms treated with conventional medicines cannot be sold as organic aquatic organisms before two withholding periods after the medicine use.

9.4.3.6 The use of antibiotic, chemical synthetic fishery medicines and hormones for routine disease prevention of aquatic products shall be prohibited. The health status of aquatic product seedlings shall be checked regularly.

9.4.3.7 In case of danger of some kind of diseases that cannot be controlled through other management techniques, or specified by state laws, vaccination can be made to aquatic organisms. No genetically modified vaccine is allowed to use.

#### 9.4.4 Reproduction

9.4.4.1 The physiologic and behavior characteristics of aquatic organisms shall be respected and the interference to them minimized. Natural reproduction shall be encouraged. Non-natural reproduction methods, such as artificial insemination and artificial hatching, etc., are restrained. The use of triploid, parthenogenesis reproduction and genetic engineering is prohibited in aquatic organism reproduction.

9.4.4.2 Varieties suitable for local conditions and strong in hardiness shall be selected as far as possible. If aquatic organism introduction is necessary, priority shall be given to those from organic production systems.

#### 9.5 Catching

9.5.1 The catching amount of organic aquatic products shall not exceed the reproduction capability of the ecological system and shall not affect the continuous production of the natural water area and the existence of other species.

9.5.2 Moderate catching measures shall be taken to minimize stress and adverse effects to aquatic organisms.

9.5.3 The size of catching tools shall conform to relevant national regulations.

#### 9.6 Transport of fresh and live aquatic products

9.6.1 The objects of transport shall be managed by special persons during transport to keep them in good health.

9.6.2 The water quality, water temperature, oxygen content, pH value and loading density of aquatic organisms shall be suitable to the requirements of the species transported.

9.6.3 The transport distance and frequency shall be minimized.

9.6.4 Transport equipment and materials shall be free from potential poisonous effects to the organisms.

9.6.5 Use of chemical synthetic depressants or stimulants are prohibited before and during transport.

9.6.6 Transport time shall normally not exceed 4h. The objects of transport shall be protected against avoidable impacts and physical injuries.

9.7 Slaughter of aquatic animals

9.7.1 In the process of slaughtering, the suffering of aquatic animals shall be minimized by making them in insentient status before slaughter. The equipment shall be regularly checked and kept in good working conditions to ensure that the aquatic animals can be made quickly insentient or dead. Regular maintenance shall be made to gas or electrical slaughter equipment.

9.7.2 Physiology and behaviors of aquatic animals shall be fully considered in management and techniques of slaughter, which shall conform to ordinary moral standards.

9.7.3 Live aquatic animals shall be kept away from dead or being slaughtered aquatic animals.

9.7.4 After aquatic animals arrive at the destination, a certain recovery period shall be given, before slaughter.

9.8 Environmental impacts

9.8.1 Drainage of enclosed water body shall be approved by local environment protective administrations.

9.8.2 Agricultural comprehensive utilization of substrate sludge of enclosed water body is encouraged.

9.8.3 Pollution to water body shall be avoided and minimized in organic aquatic organism breeding in open water.

10 Bees and their products

10.1 Conversion period

Organic certification for bees and their products can be obtained only after a conversion period of at least 12 months.

10.2 Honey collection range

10.2.1 Bee culture makes important contributions to environment, agricultural and forestry production through bee pollination. Bee farm shall be in an organic agricultural production area or a natural (wild) area without using objectionable substances for at least three years.

10.2.2 There shall be ample nectar plants and clean water sources within a range of 3km away from the bee hive (box).

10.2.3 Bee hives must be kept away from florescent conventional crops and possible pollution sources, such as urban area, highways, refuse ground, chemical plant, pesticide plant, etc., and also kept away from possible genetically modified crop plantation area, with an actual distance not less than 3km.

10.2.4 In wild areas, considerations shall be taken to the impacts to local insect population.

10.2.5 The bee keeping range shall be defined and the drawing of bee hive location shall be worked out.

10.3 Feeding of bees

10.3.1 After honey harvest period, there shall be sufficient honey and pollen in honey combs for winter.

10.3.2 In non-honey collection seasons, bees shall be provided with sufficient food with organic certification, preferably from the same production unit.

10.3.3 In case of starvation, organic syrup or molasses are allowed for artificial feeding. If organic syrup or molasses is unavailable, conventional syrup or molasses can be used for feeding with approval by certification authorities.

10.3.4 Artificial feeding can only be carried out between the finish of the last honey harvest and 15d before the next nectar flow period.

#### 10.4 Disease control

10.4.1 The health and living conditions of bee colony shall be guaranteed mainly by bee hive sanitation and management to prevent diseases and pests. The specific measures include:

- a. Select the strong breed suitable to local conditions;
- b. Renew queen bee when necessary;
- c. Regularly clean and sterilize the facilities;
- d. Regularly replace bee wax;
- e. Reserve sufficient pollen and honey in bee hive;
- f. Make systematic inspection for bee hive;
- g. System control of worker bees in the bee hive;
- h. When necessary, move the diseased bee hive to a isolated area;
- i. Destroy the contaminated materials and bee hives.

10.4.2 In case of diseases and pests, plant or plant-origin treatment or homeopathy shall be adopted in priority.

10.4.3 In case of failure of plant or plant-origine treatment or homeopathy, the following substances are allowed in disease controlling:

- a. Caustic soda;
- b. Lactic acid, oxalic acid and acetic acid;
- c. Formic acid;
- d. Sulphur;
- e. Natural essences (such as menthol, eucalyptol or natural camphor, etc.);
- f. *Bacillus thuringiensis*;
- g. Steam and flame sterilization is allowed for bee hive.

10.4.4 The diseased bee hive shall be moved to an isolated area far away from healthy bee hives.

10.4.5 The bee hives and materials seriously infected by diseases shall be destroyed.

10.4.6 Antibiotics or chemical synthetic medicines are prohibited for bee diseases prevention and treatment, except when the health of the whole bee colony is threatened. The bee hives treated by using such medicines shall be immediately removed from organic production for renewed conversion, and the bee products of the current year shall not be certified as organic products.

10.4.7 Each medication treatment shall be clearly recorded (medicine, effective pharmacological composition, diagnostic result, dosage, method, treatment duration and withholding period, etc.), and reported to the concerned authorities before selling the products as organic products.

10.4.8 The use of chemical synthetic medicines is prohibited for preventive treatment.

10.4.9 Swarm of drone is allowed to be killed only when it is infected by mites.

10.4.10 In nectar flow and bloom periods, never use any medicine for honey treatment.

#### 10.5 Feeding of queen bee and bee colony

10.5.1 Intercross breeding of different types of bees shall be encouraged.

10.5.2 Selective breeding is allowed, but artificial insemination to queen bee is prohibited.

10.5.3 To prevent diseases, queen bee shall be nurtured in the farm.

10.5.4 Killing of old queen bee is allowed for queen bee replacement, but wing cutting is not allowed.

10.5.5 Introduced bee colony shall come from organic production units as far as possible. Conventionally bred bees are allowed to be introduced by the amount not exceeding 10% of the bee colony each year.

10.5.6 It is prohibited to catch and kill bee swarms in autumn.

10.6 Bee wax and bee hive

10.6.1 Bee wax of organic bees must come from organic beekeeping units; For bee farms in conversion period, if organic bee wax is unavailable, conventional bee wax is allowed to use with approval by certification authorities. If not all bee wax can be replaced in one year, the conversion period can be extended with consent by certification authorities.

10.6.2 The bee wax processing method shall be guaranteed to produce organic bee wax for organic bee farms.

10.6.3 It is prohibited to use bee wax from unknown sources.

10.6.4 Bee hives shall be made with natural materials (such as wood without chemical treatment, etc.). Never use any poisonous materials.

10.7 Harvest and treatment of bee products

10.7.1 Bee hive management and honey collection shall be carried out with the aim of protecting and maintaining bee colony; It is prohibited to kill bee colony for yield improvement.

10.7.2 Never use chemical repellents in honey collection. Air blowing or natural smoking substances conforming to this part is allowed to use to drive bees out of bee hive with fog generators. The times and amounts of smoke shall be minimized.

10.7.3 In bee products extraction and processing, the heating temperature shall not exceed 47 degrees Celsius, and the heating process shall be as short as possible.

10.7.4 Mechanical bee hive uncovering shall be use, instead of heating method.

10.7.5 Precipitation impurities shall be removed away from honey by gravity. If fine mesh filter is used, the mesh shall be greater than or equal to 0.2mm.

10.7.6 All surfaces contacting hony shall be of stainless steel, glass, ceramic, porcelain enamel and other corrosion resistant materials, or covered with bee wax, or coated with paint permitted for food and drinks package and covered with bee wax.

10.7.7 Honey extraction facilities must be protected against entrance by bees to prevent bee from stealing honey and spreading diseases.

10.7.8 Extraction facilities shall be cleaned with hot water each day.

10.7.9 Honey centrifuge room and packaging room shall be fully enclosed against pests.

10.7.10 Only physical methods can be used in honey harvest and treatment to prevent pests.

10.7.11 It is prohibited to use cyanide and other chemical synthetic substances as fumigants.

10.8 Storage of bee products

10.8.1 Finished honey products shall be stored in sealed packages and kept at a stable temperature to avoid deterioration.

10.8.2 It is prohibited to use naphthalene or other chemical synthetic substances to control bee wax moth or other pests for storage of honey and bee products.

**Annex A****Substances allowed for use in soil fertility buildup and improvement in organic crop plantation**

Table A.1 Substances allowed for use in soil fertility buildup and improvement in organic crop plantation

Substances		Name, components and requirements	Conditions for use
I. Origin of plants and animals	Organic agriculture system	Crop stalks and green manure	
		Livestock and poultry excrement and composting (including barnyard manure)	
		Stalks	Mixed with animal manure in piles for sufficient maturity
		Livestock and poultry excrement and their composting	Meet composting requirements
		Dry farmyard manure and dewatered livestock manure	Meet composting requirements
		Seaweed or seaweed products produced through physical methods	Without chemical treatment
		Timber, bark, sawdust, paring, wood ash, charcoal and humic acid substance from wood not chemically treated	Ground covered or piled as organic fertilizer source
		Meat, bone and skin/hair products with no preservative agent	After composting or fermentation treatment
		Compost of mushroom cultivation waste and earthworm incubation media	Meet composting requirements
		Byproducts of food industry without synthetic additive	After composting or fermentation treatment
		Plant ash	
		Turf without synthetic additive	It is prohibited to be used for soil improvement; and only allowed to use as pot culture media
		Cake and meal	Not chemically processed
		Fish meal	With no chemical synthetic substances

II. Mineral source	Phosphorus ore	Natural, physically obtained, with cadmium content less than or equal 90mg/kg in phosphoric anhydride
	Kalium powder	Physically obtained without chemical concentration. Chlorine content is less than 60%
	Boric acid rock	
	Trace elements	Natural substances or substances not chemically treated with no chemical synthetic substances
	Magnesium powder	Natural substances or substances not chemically treated with no chemical synthetic substances
	Crude sulfur	
	Limestone, gypsum and chalk	Natural substances or substances not chemically treated with no chemical synthetic substances
	Clay (such as perlite, vermiculite)	Natural substances or substances not chemically treated with no chemical synthetic substances
	Calcium chloride, sodium chloride	
	Kiln ash	Substances not chemically treated with no chemical synthetic substances
	Calcium magnesium modifier	
	Epsom salt (hydrous sulfuric acid)	
	III. Microorganism source	Biodegradable microorganism processing byproducts, such as byproducts from wine making and liquor distilling industries
Preparation of microorganism in natural existence		

**Annex B****Substances and measures allowed for use in plant protection in organic crop plantation**

Table B.1 Substances and measures allowed for use in plant protection in organic crop plantation

Substances	Name, components and requirements	Conditions for use
I. Origin of plants and animals	Nim tree extracts and their formulations	
	Pyrethrum (extract of pyrethrum plants)	
	Azadiratin (extract of quassia)	
	Rotenoid (Derris ellipta)	
	Kuhseng and their formulation	
	Vegetable oil and their emulsion	
	Galenical	
	Repellent of plant origin (such as mint, lavender)	
	Natural attracting agent and nematocide (such as marigold, maidenhair)	
	Natural acid (such as vinegar, wood vinegar and bamboo vinegar)	
	Extract of mushroom	
	Milk and dairy products	
	Bee wax	
	Propolis	
	Gelatin	
Lecithin		
II. Mineral source	Nantokite (such as bluestone, cupric hydroxide, chlorine aerugo, cupric octoate)	No soil pollution
	Lime sulphur (calcium polysulfide)	
	Bordeaux mixture	
	Lime	
	Sulphur	
	Potassium permanganate	
	Potassium bicarbonate	
	Sodium bicarbonate	
	Light mineral oil (paraffin oil)	
	Calcium chloride	
	Diatomite	
	Clay (such as: bentonite, perlite, vermiculite, zeolite)	
	Silicate (sodium silicate, quartz)	

Table B.1 (continue)

Substances	Name, components and requirements	Conditions for use
III. Microorganism source	Fungi and fungi formulation (such as <i>Beauveria bassiana</i> and <i>Verticillium lecanii</i> )	
	Bacteria and bacteria formulation (such as <i>Bacillus thuringiensis</i> , or BT)	
	Release of parasitic, predatory and sterilizing natural enemies of the pests	
	Virus and virus formulation (such as: granulosisvirus)	
IV. Others	Calcium hydroxide	
	Carbon dioxide	
	Ethanol	
	Sea salt and brine	
	Soda	
	Soft soap (soft soap)	
V. Trap ware, barrier, repellent	Sulfur dioxide	
	Physical measures (such as color trap, mechanical trap)	
	Covering (net)	
	Insect sex pheromone	Only for trap and utensil
	Metaldehyde formulation	For repelling higher animals

## Annex C

**Drinking water quality requirements for organic livestock and poultry, and sterilizing agents allowable for organic livestock and poultry farms**

Table C.1 Drinking Water quality requirements for organic livestock and poultry

Items		Standard value	
		Livestock	Poultry
Sensory properties and normal chemical indexes	Chromaticity / (°)	Not exceeding 30°	
	Opacity / (°)	Not exceeding 20°	
	Smell and odor	No offensive odor	
	Visible foreign matter	None	
	Total hardness.CaCO <sub>3</sub> ./mg/L.	1 500	
	pH	5.5~9	6.8~8.0
	Total soluble solids/mg/L.	4 000	2 000
	Chloride.Cl <sup>-</sup> /mg/L.	1 000	250
Sulfate.SO <sub>4</sub> <sup>2-</sup> /mg/L.	500	250	
Bacteriological indicators	Total coliform bacteria/unit/100mL.	10 for adult livestock, 1 for pups and poultry	
Toxicological indicators	Fluoride.F <sup>-</sup> /mg/L.	2.0	2.0
	Cyanide/mg/L.	0.2	0.05
	Total arsenium/mg/L.	0.2	0.2
	Total mercury/mg/L.	0.01	0.001
	Lead/mg/L.	0.1	0.1
	Chromium (sexavalence)/mg/L..	0.1	0.05
	Cadmium / (mg/L)	0.05	0.01
	Nitrate.N <sup>-</sup> /mg/L.	30	30
	Malathion/mg/L.	0.25	
	Demeton/mg/L.	0.03	
	Methyl parathion/mg/L.	0.02	
	Parathion/mg/L.	0.003	
	Dimethoate/mg/L.	0.08	
	Lindane/mg/L.	0.004	
	Chlorothalonil/mg/L.	0.01	
Carbary/mg/L.	0.05		
2.4—D/mg/L.	0.1		

Table c.2 Sterilizing agents allowable for organic livestock and poultry farms

Substance name	Conditions for use
Soft soap	
Water and steam	
Lime water	
Unslacked lime	
Sodium hypochlorite	
Sodium hydroxide	
Potassium hydroxide	
Hydrogen peroxide	
Natural plant essence	
Citric acid	
Peracetic acid	
Formic acid	
Lactic acid	
Oxalic acid	
Acetic acid	
Alcohol	

## Annex D

### Criteria in evaluation of other substances used in organic production

In case that the products for fertility buildup and control of plant diseases and insect pests in organic agriculture as listed in Annex A and Annex B cannot meet the requirements, other substances can be used according to the evaluation criteria of the Annex.

#### D.1 Principles

##### D.1.1 Substances allowable for soil fertility buildup and soil improvement

D.1.1.1 Substances necessary for reaching or maintaining soil fertility or satisfying special nutritional requirements, but not replaceable by using the methods listed in Annex A and in this part.

D.1.1.2 The substances shall come from plants, animals, microorganisms or minerals, allowable through the following treatments:

- a. Physical (mechanical, heat) treatment;
- b. Enzyme treatment;
- c. Microorganism (composting, digestion) treatment.

D.1.1.3 The use of the substances shall not cause unacceptable impacts or pollution to the environment, including impacts and pollution to soil organisms.

D.1.1.4 The use of the substances shall not cause unacceptable impacts to the quality and security of final products.

D.1.2 The use of allowable substances to control plant diseases, pests and weeds

D.1.2.1 The substances are necessary for control of pests or special diseases, with no replaceable biologic, physical methods or plant breeding methods and (or) effective management techniques to control such pests or special diseases.

D.1.2.2 The substances (active compounds) shall be originated from plants, animals, microorganisms or minerals, and may be through the following treatments:

- a. Physical treatment;
- b. Enzymatic treatment;
- c. Microbiological treatment.

D.1.2.3 The use of the substances shall not cause unacceptable impacts or pollution to the environment, including impacts and pollution to soil organisms, as proved with reliable test results.

D.1.2.4 If a substances is insufficient in quantity in its natural form, a chemical synthetic substance with the same property as the natural substances, such as chemical synthetic ectohormone (gyplure), can be considered, provided that the use of it will not directly or indirectly cause pollution to the environment or products.

#### D.2 Evaluation procedures

##### D.2.1 Necessity

Input substances can only be used when necessary. The necessity of inputting the substance can be evaluated from output, product quality, environmental safety, ecological protection, landscape, human and animal living conditions, etc.

The use of input substances can be restrained to:

- a. Special crop (especially perennial crop);
- b. Special areas;
- c. Special conditions for the use of the input substances.

## D.2.2 Property and production process of the input substances

### D.2.2.1 Property of input substances

The source of input substance shall normally be (in preferred sequence):

- a. Organic matters (plants, animals, microorganisms);
- b. Minerals.

Chemical synthetic substances equivalent to native products can be used.

Where possible, priority shall be given to regenerable input substances.

Secondarily, mineral originated input substances shall be selected; and the third selection shall be those that have equivalent chemical property as natural products. In using input substances with equivalent chemical property, the ecological, technical and economic reasons shall be considered.

### D.2.2.2 Production methods

Ingredients of input substance can be subject to the following treatments:

- a. Mechanical treatment;
- b. Physical treatment;
- c. Enzyme treatment;
- d. Microbial action treatment;
- e. Chemical treatment (as exception with restriction).

### D.2.2.3 Collection

The collection of raw materials of input substance shall not affect the stability of natural environment and the existence of any species in the collection area.

## D.2.3 Environmental safety

Input substances shall not hazard the environment or produce persistent negative effects to the environment. Input substances shall not produce unacceptable pollution to surface water, groundwater, air or soil. Evaluation shall be carried out for the processing, use and decomposition of such substances.

The following properties of the input substances must be considered:

### D.2.3.1 Degradability

All input substances must be degradable into carbon dioxide, water and (or) their mineral form.

The half life of non-target organism input substances with high acute toxicity shall not exceed 5d.

For non-poisonous natural substances, there is no degradation time limit.

### D.2.3.2 Acute toxicity for non-target organisms

In case that the acute toxicity of input substance is high to non-target organism, the use shall be restrained. Measures shall be taken to guarantee the existence of non-target organisms. The maximum allowable amount can be specified. If the existence of non-target organisms cannot be guaranteed, the input substances shall not be used.

### D.2.3.3 Long-term chronic toxicity

Input substances that may build up in organism or biological system shall not be used. Input substances that are known or suspicious of having mutagenicity or carcinogenicity shall not be used. If the input of such substances may produce dangers, measures shall be taken to reduce such dangers to an acceptable level and prevent long time, continuous negative impacts to the environmental.

### D.2.3.4 Chemical synthetic products and heavy metals

Input substances shall not contain chemical synthetic substances (heteroplasia compound products) in hazardous amounts. Only if the properties are fully identical to natural products, can the chemical synthetic products be permitted for use.

The heavy metal content in the input mineral substances shall be minimum. The exceptions include copper and nantokite, which have been used in organic

agriculture for a long-term due to the lack of substitute. The use of copper in any forms in organic agriculture shall be deemed as provisional, and shall be restrained to avoid environmental impacts.

#### D.2.4 Impacts to human health and product quality

##### D.2.4.1 Human health

Input substances must be harmless to human health. All possibilities of the input substances in processing, use and degradation shall be considered, and measures shall be taken to minimize the risks of using input substances. Standards for using input substances in organic agriculture shall be formulated.

##### D.2.4.2 Product quality

Input substances shall have no negative impacts to product quality (such as taste, shelf life and appearance quality, etc.).

##### D.2.5 In ethic -- animals living conditions

Input substances shall have no negative impacts to the natural behavior or physical functions of the animals in the farm.

##### D.2.6 In social economy

Consumers' sensory feelings: The input substances shall not cause consumers of organic products to have any repulsion or antipathy against the organic products. Consumers may deem that some input substances are unsafe to environment or human health, even it has not been proven by scientific fact. The problems of input substances (such as the problems of genetic engineering) shall not interfere the general senses or opinions toward natural or organic products.

**Organic Product Part 2: Processing**

(GB/T 19630.2)

## Foreword

GB/T 19630 "Organic Product" is divided into four parts:

- Part 1: Production;
- Part 2: Processing;
- Part 3: Labeling and marketing;
- Part 4: Management system.

This part is Part 2 of GB/T 19630.

Annex A of this part is normative and Annex B is informative.

This part was proposed by Certification and Accreditation Administration of China.

This part was drafted by: Hangzhou Wantai Certification Co., Ltd. and China Qualification Appraisal National Accreditation Center.

This part was authored by: Lu Zhenhui, Yuan Qing, Chen Yunhua, Xu Na, Wang Maohua.

## 1.Scope

This part of GB/T 19630 specifies the general specifications and requirements for organic processing.

This part is applicable to the overall process of processing, packaging, storage and transport of the unprocessed products of GB/T 19630.1 as raw materials.

The organic textile products mentioned in this part are applicable to the products of cotton or silk fiber materials.

## 2.Normative reference documents

The following standards contain provisions which, through reference in this part of GB/T 19630, constitute provisions of this part. Any modification lists (except text corrections) or revisions of the reference documents with specific date shall not apply to the standard. But, all parties of agreement based on the standard are encouraged to discuss if the newer versions of those documents are applicable. All the latest editions of the referenced documents without date indication are applicable to this part.

GB 2760 Hygienic Standards for Uses of Food Additives

GB 4287 Discharge standard of water pollutants in textile, dyeing and finishing industries

GB 5749 Sanitary standard for drinking water

GB 14881—1994 General hygiene specification for food enterprises

GB/T 18885—2002 Technical requirements for ecological textile products

GB/T 19630.1—2005 Organic Product Part 1: Production

## 3.Terms and definitions

The following terms and definitions apply to this part of GB/T 19630.

## 3.1 Ingredient

Ingredients: any substance that is used in making or processing foods and exists in final products (including in a modified form), including food additives,

## 3.2 Food additives

Food additives: Chemical synthetic or natural substances added in foods to improve the quality, color, smell, taste, shape, nutritive value, and for preservation or as needed in process.

## 3.3 Food processing aids

Substances or materials (excluding equipment and vessel) used only for a technical purpose in processing, preparation and treatment processes, not as food ingredient.

### 3.4 Ionizing irradiation

Irradiation of radioactive nuclides (such as cobalt 60 and cesium 137), to control microorganisms, parasites and pests in foods, for the purpose of food preservation or suppression of physiological processes such as germination or maturation.

## 4 Requirements

### 4.1 Generals

4.1.1 Effective control shall be exercised for the organic processing and all subsequent processes involved in this part, to maintain the organic completeness of the processing.

4.1.2 The plant for organic food processing shall conform to GB/T 14881-1994 and other processing plants shall conform to relevant national and industrial regulations.

### 4.2 Environment of processing plant

4.2.1 Around the plant, there shall be no dust, harmful gas, radioactive substance and other diffusive pollution sources; there shall be no refuse piles, dung yard, outdoor lavatory or infectious disease hospital; and there shall be no places for massive insect breeding.

4.2.2 Protective belts shall be arranged between the buildings in production area and exterior highways or roads.

4.2.3 Documents of hygienic control plan shall be formulated to provide hygienic guarantees as follows:

a.External facilities (dumping site, used equipment store place, parking lots, etc.);

b.Internal facilities (processing, packaging and storage zone);

c.Processing and packaging equipment (prevent microzyme, mold and bacterial contamination);

d.Staff hygienic facilities (dining hall, rest room and lavatory).

### 4.3 Ingredients, additives and processing aids

4.3.1 Ingredients used in processing must be certified organic raw materials, natural or approved by certification authorities. The mass or volume of such organic ingredients shall not be less than 95% of the gross ingredient amount.

4.3.2 When there is no sufficient organic ingredients available, non-synthesized conventional ingredients are allowed to use but shall not exceed 5% of gross ingredient amount. Once organic ingredients are available, organic ingredients shall be used immediately. Processing plants using non-organic ingredients shall submit their plans for changing the ingredients into 100% organic ingredients.

4.3.3 It is prohibited to have an ingredient containing simultaneously organic, conventional or conversion compositions.

4.3.4 Water and edible salt as ingredients must conform to national hygienic standards for foods, and shall not be deemed as organic ingredients involved in 4.3.1.

4.3.5 Additives and processing aids in Annex A are allowed to use, with conditions conforming to GB 2760. Natural additives in GB 2760 are also allowed to use. Other substances may be used with prior evaluation according to Annex B.

4.3.6 It is prohibited to use mineral substances (including trace element), vitamin, aminoacid and other pure substances separated from animals and plants, except those lawfully specified or seriously lack in nutritional contents.

4.3.7 It is prohibited to use genetically modified ingredient, additives and processing aids.

### 4.4 Processing

4.4.1 Special equipment shall be furnished for organic processing. If it is necessary to share equipment with conventional processing, the equipment shall be thoroughly cleaned after conventional processing, and any detergent residual removed. It may also, after organic conversion or conventional processing and before organic processing, process a small amount of organic raw materials to drive out the materials remained in the equipment in the previous processing (i.e., wash processing). The products of wash processing shall not be sold as organic products. Records of wash processing shall be kept.

4.4.2 Mechanical, refrigeration, heating, microwave, smoking and microorganism fermentation can be adopted, provided that the main nutritional contents of the food shall not be damaged; Extraction, concentration, sedimentation and filtration processes can be used. The extraction solvents shall be limited to water, ethanol, animal and vegetable oil, vinegar, carbon dioxide, nitrogen or carboxylic acid conforming to national hygienic standards for foods. No other chemical reagent shall be added in extraction and concentration processes.

4.4.3 Water quality shall conform to GB 5749.

4.4.4 It is prohibited to use ionizing irradiation in food processing and storage processes.

4.4.5 In food processing, it is prohibited to use asbestos filter material or other filter materials that may be penetrated by harmful substances.

#### 4.5 Pests control

4.5.1 To prevent pests, the following management measures shall be taken in priority:

- a. Eliminate pest breeding conditions;
- b. Prevent pests from contacting the processing and treatment equipment;
- c. Prevent reproduction of pests through control of environmental factors

such as temperature, humidity, illumination and air.

4.5.2 Pest control facilities or materials of mechanical, pheromone, smelling and sticking tools, physical barrier, diatomite, acoustic, optic and electric devices are allowed to use.

4.5.3 Rodenticide with vitamin D as basic effective ingredient is allowed to use.

4.5.4 Substances in Annex B of GB/T 19630.1-2005 are allowed to use.

4.5.5 In case of emergency when the processing or storage place is seriously invaded by pests, spraying and fumigating by Chinese medicinal herbs are encouraged. The use of sulphur shall be restrained. If conventional fumigants are to be used for processing equipment or storage places, move all organic products out of the fumigated places. The organic products can be moved back at least 5d later after the fumigating. It is prohibited to use persistent and carcinogenesis disinfectants and fumigants.

#### 4.6 Package

4.6.1 Packing materials of wood, bamboo, plant stems and leaves and paper shall be used. other packing materials conforming to hygienic requirements are allowed to use.

4.6.2 Package shall be simple and practical, and not be excessive. The recovery utilization of packing materials shall be considered.

4.6.3 Carbon dioxide and nitrogen are allowed to use for package stuffing.

4.6.4 It is prohibited to use packing materials containing synthetic germicide, preservative agent and fumigant.

4.6.5 It is prohibited to place organic products in packages or containers used to be in contact with objectionable substances.

#### 4.7 Storage

4.7.1 Certified products shall not be contaminated by other substances in storage.

4.7.2 Storehouse shall be clean and free from pests or harmful substances and shall have not been treated with any objectionable substances in 5 days.

4.7.3 Except storage at normal temperature, the following storage methods are allowed:

- a. Air regulation and control;
- b. Temperature control;
- c. Drying;
- d. Humidity control.

4.7.4 Organic products shall be stored separately. If it is necessary to store organic products together with conventional products, a special area shall be marked out in the storehouse and necessary packages and labels shall be used to guarantee that the organic products can be recognized from uncertified products.

4.7.5 Complete records and corresponding bills shall be kept for the inventory and transactions.

#### 4.8 Transport

4.8.1 Before loading organic products, transport vehicles shall be cleaned.

4.8.2 In transport process, organic products shall be separated from conventional products or protected against contamination.

4.8.3 During transport and loading and unloading, the organic certification marks and related instructions shall be kept legible and intact.

4.8.4 Complete records and corresponding bills shall be kept for the transport and loading/unloading.

#### 4.9 Environmental impacts

4.9.1 The facilities for waste purification, emission or storage shall be kept away from production area and shall not be in the upwind direction of the production area. The storage facilities shall be enclosed or covered and convenient for cleaning and sterilizing.

4.9.2 Waste emission shall meet corresponding standards.

#### 4.10 Textile products

##### 4.10.1 Raw materials

a. The fibrous materials of textile products shall be of 100% organic.

b. In fiber processing, impacts to environment shall be minimized.

c. The non-textile materials in textile products shall not be harmful to environment and human being in production, use and waste treatment process.

##### 4.10.2 Processing

a. Optimal production methods shall be adopted in processing of textile products, so as to minimize impacts to the environment.

b. It is prohibited to use any substance harmful to human health and environment. Any accessory ingredient shall not contain any carcinogenic, teratogenic, mutagenic or sensitization substance, with mammalian toxicity LD50 greater than 2000 mg/kg.

c. It is prohibited to use substances known liable to biological accumulation and or non-biodegradable.

d. In textile processing, energy consumption shall be minimized and regenerative resources shall be utilized.

e. If separation of organic processing from conventional processing in process or equipment may cause evident adverse impacts to environment or economy, and non-separation will not lead to risks for organic textile products to contact the circulating fluids (such as those in caustic pretreating, starching, rinsing processes) for conventional processing, the non-separation of organic and conventional processes is allowable, provided that the organic textile products are guaranteed not to be contaminated by objectionable substances.

- f. Effective sewage treatment process shall be adopted to guarantee that the pollutant concentration in drainage shall not exceed the data specified in GB 4287.
- g. Environmental management improvement plan for production processes shall be worked out in the year of obtaining organic certification.
- h. Surface-active agent used in cocoon boiling or wool scouring shall be biodegradable.
- i. Fluids shall be easily degradable or reusable in the percentage of at least 80%.
- j. In mercerizing process, sodium hydroxide or other alkaline matters are allowed to use, provided it can be reused for the maximum cyclic utilization.
- k. Textile oil and weaving oil (needle oil) shall be biodegradable or clean agent extracted from plants.
- l. The stipulations in 4.2 for processing plant hygiene, in 4.5 for pest control, in 4.6 for storage, in 4.7 for transport and in 4.8 for package are applicable to textile products processing. The stipulations in 4.3 for ingredients, food additives and processing aids are not applied to textile products processing.

#### 4.10.3 Dyestuff and dyeing/finishing

a. Plant or mineral origin dyestuff shall be used.

b. It is prohibited to use harmful dyestuff and substances disallowed in GB/T 18885-2002, such as poisonous aromatic amines, chlorinated phenols, insecticides, organochlorine carriers, PVC plasticizers and unallowable fire retardants, etc.

c. Natural printing and dyeing thickening agents are allowed to use.

d. Biodegradable softening agents are allowed to use.

e. It is prohibited to use substances that may form organohalogen compounds in sewage for cleaning of printing and dyeing equipment.

f. Heavy metal contents in dyestuff shall not exceed the indicated level in Table 1.

Table 1 Indicators of heavy metal contents in dyestuff

Metals	Indicated level/ (mg/kg)	Metals	Indicated level/ (mg/kg)	Metals	Indicated level/ (mg/kg)
Antimony	50	Arsenic	50	Barium	100
Lead	100	Cadmium	20	Chromium	100
Iron	2500	Copper	250	Manganin	1000
Nickel	200	Mercury	4	Selenium	20
Silver	100	Zinc	1500	Tin	250

#### 4.10.4 Finished products

a. Auxiliary materials (such as liner, ornaments, button, zipper, thread, etc.) shall be environment-friendly materials, and preferably natural materials.

b. No accessory ingredients harmful to human body and environment shall be used in processing of finished products (such as sand washing and water washing).

c. The contents of harmful substances in finished products shall not exceed the stipulations in GB/T 18885-2002.

**Annex A****Non-agricultural origin ingredients and additives allowed to use in organic food processing**

## A.1 non-agricultural origin food additives and processing aids

Table A.1 Non-agricultural origin food additives and processing aids

No.	Substance	Descriptions	INS
1	Agar	Thickener for foods	406
2	Gum Arabic	Thickener, for drinks, chocolate, ice cream, jam.	414
3	Calcium carbonate	Swelling agent, additive and processing aid, for flour, 30 mg/kg <sup>a</sup> .	170
4	Calcium chloride	Hardener, for bean products.	509
5	Calcium hydroxide	Additive and sugar processing aid for corn meal.	526
6	Calcium sulfate (natural)	Stabilizer, hardener, for flour and bean products.	516
7	Active carbon	Processing aid.	
8	Carbon dioxide	Preservative agent, processing aid, non-petroleum products. For soda drinks, sparkling wine.	290
9	Citric acid	Acidity regulator, carbohydrate product of microorganism fermentation. For foods.	330
10	Bentonite (bentonite, bentonite)	Dipping or filtration aid.	
11	Kaolin	Clarification or filtration aid.	559
12	Diatomite	Filtration adjuvant.	
13	Ethanol	Solvent.	
14	Lactic acid	Acidity regulator, no genetically modified, for foods.	270
15	Magnesium chloride (natural)	Stabilizer and hardener, for bean products.	
16	Malic acid	Acidity regulator, no genetically modified. For foods	296
17	Nitrogen	For food preservation, only non-petroleum origin allowed to use.	941
18	Perlite	Filtration aid.	
19	Potassium carbonate	Acidity regulator, only allowed to use when natural sodium carbonate is available, for paste products.	501
20	Potassium chloride	For mineral drinks, sports drinks, low sodium salt soy sauce, low sodium salt.	508
21	Potassium citrate	Acidity regulator, for foods	332
22	Sodium carbonate	Acidity regulator, for flour foods, cookies.	500
23	Sodium citrate	Acidity regulator, for foods.	331
24	Tartaric acid	Acidity regulator, for foods.	334
25	Xanthan gum	Thickener, for jelly, fancy sauce.	415
26	Sulfur dioxide	Bleacher, for port wine, fruit wine.	220
27	Potassium bisulfite	Bleacher, for beer.	224

	(potassium metabisulfite)		
28	Ascorbic acid (vitamin c)	Antioxidant, for beer, fermented flour products.	300
29	Lecithin	Antioxidant.	322
30	Ammonium phosphate	Processing aid.	
31	Pectin	Thickener for foods.	440

Table A.1 (continued)

No.	Substance	Descriptions	INS
32	Magnesium carbonate	Processing aids, for flour processing.	504
33	Sodium hydroxide	Acidity regulator, processing aid.	524
34	Silicon dioxide	Anticaking agent, for egg powder, powdered milk, cocoa powder, cocoa butter, powdered sugar, vegetable powder, instant coffee, powdered soup, powder essence.	551
35	Talc	Processing aid.	553
36	Gelatin	Thickener for foods.	
37	Sodium alginate	Thickener for foods.	401
38	Potassium alginate	Thickener for foods.	402
39	Ammonium bicarbonate	Swelling agent, for foods.	503
40	Argon	For food preservation.	938
41	Egg white protein	Processing aid.	
42	Guar gum	Thickener for foods	412
43	Locust bean gum	Thickener, for jelly, ice cream, jam.	410
44	Oxygen	Processing aid.	948
45	Potassium bitartrate	Swelling agent, for baking powder.	336
46	Tannin	Alcoholic filtration aid.	184
47	Carrageenin	Thickener for foods.	407
48	Carnauba wax	Processing aid.	903
49	Casein	Processing aid.	
50	Mica (talcum)	Processing aid (stuffing).	
51	Vegetable oil	Processing aid.	
<sup>a</sup> The value is the maximum amount specified in GB 2760. For substances without the maximum dosage specified, a proper amount can be used as necessary.			

## A.2 Seasonings

a.Essential oil: Natural spices extracted through mechanical and physical methods with oil, water, alcohol, carbon dioxide as solvent;

b.Natural smoky flavor seasonings;

c.Natural seasonings: shall be evaluated and approved according to the criteria for additives and processing aids evaluation in Annex B.

## A.3 Microorganisms products

a.Natural microorganisms and their products: except genetic engineering organisms and their products;

b.Ferments: without using bleacher and organic solvent in production process.

A.4 Other ingredients

a. Drinking water;

b. Table salt;

c. Mineral substances (including trace elements) and vitamins; only when lawfully specified or seriously lack in food proved with conclusive evidences.

**Annex B****Criteria of evaluation for organic food additives and processing aids**

The food additives and processing aids listed in Annex A may not cover all substances conforming to organic production principles. If a substance is not listed in Annex A, the certification authorities shall make evaluation to the substance according to the following criteria, so as to determine if it is suitable to use in organic food processing.

**B.1 Necessity**

Each additive and processing aid can only be allowed to use in organic food production when necessary and the following principles shall be observed:

- a. Observe the organic trueness of the products.
- b. The products cannot be produced and preserved without such additives and processing aids.

**B.2 Conditions for approval of additives and processing aids**

The approval of additives and processing aids shall satisfy the following conditions:

- a. There is no other acceptable process available for processing or preserving the organic products.
- b. The use of additives or processing aids shall play a role of minimizing the physical or mechanical damage to the food, which may be possibly caused by adopting other processes.
- c. The food hygiene cannot be effectively guaranteed by adopting other methods, such as shortening transport time or improving storage facilities.
- d. Such additives or processing aids cannot be substituted by natural materials in quality and quantity.
- e. The additives or processing do not endanger the organic integrity of the products.
- f. The use of additives or processing aids may not give consumers a impression that the quality of final product is better than that of the raw materials and make consumers confused. This mainly involves, but not limited to, pigments and spices.
- g. The use of additives and processing aids shall not affect the general quality of the product.

**B.3 Order of priority of using additives and processing aids**

**B.3.1** The following proposals shall be selected in priority to substitute for the use of additives or processing aids:

- a. Crops and their processed products produced according to standard requirements of organic certification, and such products need no other additional substance such as flour as thickener or vegetable oil as lubricating agent.
- b. Plant and animal origin foods or raw materials produced only with mechanical or simple physical methods, such as salt.

**B.3.2** Secondary selection is:

- a. Simple food composites produced by using physical method or enzyme, such as starch, tartrate and pectin.
- b. Products and microorganisms purified from non-agricultural origin raw materials, such as acerola fruit juice, yeast cultured materials and other enzymes and microbiological products.

**B.3.3** The following additives and processing aids are not allowed to use in organic foods:

- a. Substances "equivalent" to natural substances in property.

b.Synthetic substances being basically deemed as non-natural or "new structure of food composite", such as acetyl crosslinked starch.

c.Additives or processing aids produced by using genetic engineering methods.

d.Synthetic dyestuff and synthetic preservative agent.

The carriers and preservative agents used in preparation of additives and processing aids shall also be considered.

**Organic products – Part 3 : Labeling and marketing**

(GB/T 19630.3)

## Foreword

GB/T 19630 "Organic Product" is divided into four parts:

- Part 1: Production;
- Part 2: Processing;
- Part 3: Labeling and marketing;
- Part 4: Management system.

This part is Part 3 of GB/T 19630.

This part was proposed by Certification and Accreditation Administration of China.

This part was drafted by: China Standardization Research Institute and China Qualification Appraisal National Accreditation Center.

This part was authored by: Yang Li, Liu Wen, Wang Maohua, Chen Yunhua, Xu Na.

## 1.Scope

This part of GB/T 19630 specifies the general specifications and requirements for labeling and marketing of organic products.

This part is applicable to labeling and marketing of products produced or processed according to GB/T 19630.1, GB/T 19630.2 and awarded with certification.

## 2.Normative reference documents

The following standards contain provisions which, through reference in this part of GB/T 19630, constitute provisions of this part. Any modification lists (except text corrections) or revisions of the reference documents with specific date shall not apply to this part. But, all parties of agreement based on this part are encouraged to discuss if the newer versions of those documents are applicable. All the latest editions of the referenced documents without date indication are applicable to this part.

GB/T 19630.1 Organic Product Part 1: Production

GB/T 19630.2 Organic Product Part 2: Processing

GB/T 19630.4 Organic Product Part 4: Management system

## 3. Terminologies and definitions

The following terms and definitions apply to this part of GB/T 19630.

## 3.1 Labeling

Marks in written or printed words or graphics on products, package of products, label of products or descriptive materials provided together with the products.

## 3.2 Certification mark

Special symbol, pattern or combination of symbol, pattern and words certifying that the product is produced or processed conforming to organic standards and passed the certification.

## 3.3 Marketing

Wholesale, direct marketing, exhibiting and selling, marketing on commission, distributing, retailing or other activities to put the products into market.

## 4 General rules of labeling

- 4.1 Organic products shall be labeled according to related national laws, regulations and standards.
- 4.2 The term "organic" and the mark of China Organic Product Certification can only be used for labeling of organic products produced and processed according to GB/T 19630.1, GB/T 19630.2 and GB/T 19630.4, unless the meaning of "organic" is completely not related to this part.
- 4.3 Products without organic product certification shall not use the label of organic product certification.
- 4.4 The texts, graphics or symbols in the label shall be legible and distinct. The graphics and symbols shall be illustrative and normalized. The texts, graphics and symbols shall be in contrast color against the background.
- 4.5 The texts in the label shall be normalized Chinese characters conforming to national regulations. Corresponding Pinyin, foreign language or texts of ethnic minorities can be simultaneously used, but the font size of such texts shall not be greater than that of the Chinese characters.
- 4.6 The labeling and organic product certification labels of imported organic products shall also conform to this part.
- 4.7 Products for export or produced according to foreign organic standards or on request by foreign buyer can be labeled according to the requirements by the country or the buyer.

## 5 Requirements of product labeling

- 5.1 Only products produced according to national standards for organic products and awarded with organic product certification can be prefixed with "organic" on the product name, with China organic product certification label attached on the products or package, accompanied with label or name of the certification authorities.
- 5.2 Only products processed with the organic ingredient content equal or higher than 95% and awarded with organic product certification can be prefixed with "organic" on the product name, with China organic product certification label attached on the products or package, accompanied with label or name of the certification authorities.
- 5.3 Only products processed with the organic ingredient content equal or higher than 95% and awarded with organic conversion product certification can be prefixed with "organic conversion" on the product name, with China organic conversion product certification label attached on the products or package, accompanied with label or name of the certification authorities. The label of certification authorities shall not contain any contents that may mislead consumers to deem organic conversion products as organic products.
- 5.4 Products processed with organic ingredient content lower than 95% but equal or higher than 70% can be prefixed with "organic ingredient production" on the product name, together with statement of proportions of organic ingredients as certified.
- 5.5 Products processed with organic ingredient content lower than 95% but equal or higher than 70%, with the organic ingredients are products in conversion period, can be prefixed with "organic conversion ingredient production" on the product name, together with statement of proportions of organic conversion ingredients as certified.
- 5.6 Products processed with organic ingredient content lower than 70% can only be stated with the certified organic ingredients as "organic" in the ingredient list, together with the proportions of organic ingredients.
- 5.7 Products processed with organic ingredient content lower than 70%, with the organic ingredients being products in conversion period, can only be state

with "organic conversion" for the certified ingredients in the ingredient list, together with statement of proportions of organic conversion ingredients.

## 6 Calculation of percentage of organic ingredients

6.1 For solid organic products, the percentage of organic ingredients shall be calculated with equation (1):

$$\text{Organic ingredient percentage} = \frac{\text{Total mass of organic ingredients in product (excl. water and salt)}}{\text{total product mass (excluding water and salt)}} \times 100\% \dots 1.$$

6.2 For liquid organic products, the percentage of organic ingredients shall be calculated according to equation (2) (for those resembled from concentrates, the percentage of organic ingredients shall be based on the finished ingredients and products):

$$\text{Organic ingredient percentage} = \frac{\text{Gross volume of organic ingredients in product (excl. water and salt)}}{\text{Gross volume of product (excl. water and salt)}} \times 100\% \dots 2.$$

6.3 For organic products in solid and liquid formas, the percentage of organic ingredients shall be calculated with equation (3):

$$\text{Organic ingredient percentage} = \frac{\text{Gross mass of organic ingredients in product (excl. water and salt)}}{\text{Gross mass of product (excl. water and salt)}} \times 100\% \dots 2.$$

6.4 The percentage of organic ingredients shall be rounded to integer.

## 7 Mark of China Organic Product Certification

7.1 The marks of China Organic Product Certification and China Organic Conversion Product Certification shall only be used for organic products or organic conversion products produced or processed according to national organic product standards and certified by certification authorities.

7.2 The graphics and color of China Organic Product Certification and China Organic Conversion Product Certification shall be as shown in Fig. 1 and Fig. 2.



Fig. 1 Mark of China Organic Product Certification



Fig. 2 Mark of China Organic Conversion Product Certification

7.3 The printed marks of China Organic Product Certification and China Organic Conversion Product Certification shall be legible and distinct.

7.4 Marks of China Organic Product Certification and China Organic Conversion Product Certification printed in product labels, instruction books and advertising materials can be varied in size but shall not be deformed or changed in color.

## 8 Mark of certification authorities

8.1 The mark and name of organic product certification authorities shall be printed legibly.

8.2 The mark of organic product certification authorities shall only be used for products produced or processed according to national organic product standards and certified by the certification authorities.

8.3 The graphics or texts of the mark of certification authorities shall not be larger than the marks of China Organic Product Certification or China Organic Conversion Product Certification.

## 9 Marketing requirements

9.1 To ensure the integrality and traceability of organic products, the following measures shall be taken by seller in marketing process:

- Avoid mixing organic products with non-organic products;
- Prevent organic products from contacting substances not allowed to use in this part;
- Keep records of purchase, transport, storage, inventory and selling of organic products.

9.2 In purchase of organic products, the dealers shall ask for certification materials of organic product certification. For products with organic ingredients lower than 95% and labeled with "organic ingredients production", the certification materials shall include information on the origin of organic products.

9.3 Verify the validity of the organic product certification and keep the photocopies of the certificate.

9.4 Provide special zone or special showcase for organic products, separated from non-organic products.

9.5 Display the photocopy of certificate of organic product certification in a visible place in the special zone or special showcase for organic products.

9.6 Do not sell products not conforming to the labeling requirements of this part in GB/T 19630 as organic products.

## Organic Product Part 4: Management System

(GB/T 19630.4)

### Foreword

GB/T 19630 "Organic Product" is divided into four parts:

- Part 1: Production;
- Part 2: Processing;
- Part 3: Labeling and marketing;
- Part 4: Management system.

This part is Part 4 of GB/T 19630.

This part was proposed by Certification and Accreditation Administration of China.

This part was drafted by: Zhonglu Huaxia Organic Food Certification Center and China Qualification Appraisal National Accreditation Center.

This part was authored by: Guo Chunmin, Li Xianjun, Gao Xiuwen, Shi Songkai, Wang Maohua, Chen Yunhua, Xu Na.

### 1.Scope

This part of GB/T 19630 specifies general specifications and requirements for the management system to be established and maintained in production, processing and marketing of organic products.

This part is applicable to producers, processors, handlers and related supply links of organic products.

### 2.Normative reference documents

The following standards contain provisions which, through reference in this part of GB/T 19630, constitute provisions of this part. Any modification lists (except text corrections) or revisions of the reference documents with specific date shall not apply to this part. But, all parties of agreement based on this part are encouraged to discuss if the newer versions of those documents are applicable. All the latest editions of the referenced documents without date indication are applicable to this part.

GB/T 19630.1 Organic Product Part 1: Production

GB/T 19630.2 Organic Product Part 2: Processing

GB/T 19630.3 Organic Products Part 3: Labeling and marketing

### 3.Terms and definitions

The following terms and definitions apply to this part of GB/T 19630.

#### 3.1 Organic producer

Units or individuals dealing in organic plantation, breeding and wild products collection according to this part, having obtained the certification by organic certification authorities for their production units and products and the approval for using organic product mark on the products.

#### 3.2 Organic processor

Units or individuals dealing in processing of organic products, having obtained the certification by organic certification authorities for their process units and products and the approval for using organic product mark on the products.

#### 3.3 Organic handler

Units or individuals dealing in transport, storage, package and trade of organic products, having obtained the certification by organic certification authorities for their units and products and the approval for using organic product mark on the products.

#### 3.4 Production base

Production units dealing in organic plantation, breeding or wild product collection.

### 3.5 Internal auditor

Managerial persons in the organic product producing, processing handling unit, responsible for examination of organic management system and cooperating in inspection and certification by the organic certification authorities.

## 4 Requirements

### 4.1 Basic requirements

4.1.1 The producer, processor and handler of organic products shall have the legal right for the land use and legal business license.

4.1.2 The producer, processor and handler of organic products shall establish and maintain the management system of organic production, processing and handling according to GB/T 19630.1-GB/T 19630.3. The management system shall be written in series documents according to 4.2 in this part and be implemented and maintained.

### 4.2 Documentation

4.2.1 The documents of management system of organic production, processing and handling shall include:

- a. Location maps of production base or places for processing or handling;
- b. Quality control manuals of organic production, processing and handling;
- c. Operation specifications for organic production, processing and handling;
- d. System records of organic production, processing and handling.

4.2.2 Location maps of production base or places for processing or handling

The location maps shall be made in a proper scale to show the production base or the places of processing or handling. The maps shall be timely updated to reflect any changes. The contents of the maps shall include, but not limited to, the following:

- a. The geographic distribution of plantation fields, wild collection/aquatic product catching zones, processing or handling areas, aquatic farms, bee farms, livestock and poultry cultivation farms, pasture, playgrounds and free grazing zones;
- b. River, water well and other water sources;
- c. Utilization of adjacent lands and boundaries;
- d. Livestock and poultry quarantine and isolation areas;
- e. Distribution of processing/package workshop; raw materials/finished goods warehouse and related equipment;
- f. Major markers indicating the characteristics of the production base.

4.2.3 Quality control manuals of organic production, processing and handling

Quality control manuals of organic production, processing and handling shall be worked out, which shall include the following contents:

- a. Brief introduction of the producer, processor and handler of organic products;
- b. Management policy and objective of the producer, processor and handler of organic products;
- c. Management organization chart and responsibility and privilege of related persons;
- d. Implementation plan of organic production, processing and handling;
- e. Internal inspection;
- f. Tracing examination;
- g. Record management;

h.Processing of client complaints.

#### 4.2.4 Operation specifications of production, processing and handling

Operation specifications for production, processing and handling shall be worked out, including the following:

- a.Operation specifications for organic production, processing and handling of crop cultivation, wild collection, livestock and poultry, bee, aquatic farming, etc.;
- b.Specifications for preventing mix of organic products, conversion period products and non-organic products, and protecting organic production, processing and handling against pollution by objectionable substance;
- c.Crop harvest specifications and management specifications for transport, processing and storage, etc.;
- d.Management specifications for slaughtering, catching, processing, transport and storage of livestock, poultry and aquatic products;
- e.Specifications for maintenance and cleaning of mechanical equipment;
- f.Specifications for employees welfare and labor protection.

#### 4.2.5 Control of documents

The documents required for organic production and processing management system shall be the latest and valid, and effective versions of applicable document shall be guaranteed in use.

#### 4.2.6 Control of records

The producer, processor and handler of organic products shall establish and maintain records. The records shall be legible and accurate, to provide valid evidences for organic production and processing activities. The records shall be kept for at least 5 year and shall include, but not limited to, the following contents:

- a.Historic records of land, crop plantation and livestock, poultry, bee and aquatic farming, and the time and dosage of the last use of objectionable substances;
- b.Varieties, origin, quantity and other information on seeds, seedlings, seed stock/poultry and other reproduction materials;
- c.Raw materials origin, proportion, type, composting method and application amount of compost manure;
- d.Name, composition, origin, use method and use amount of substances for controlling diseases, insects and weeds;
- e.Complete registrations shall be kept for inventory of livestock and poultry farms (and bee farms). It shall include detailed information on the animals entering into the unit (varieties, origin, quantity, date of entry, etc.), together with details of age, quality, label and destination for slaughtering.
- f.For livestock and poultry cultivation farms (and bee farms), animal medicine use shall be recorded, including: purchasing date and supplier; product name, effective compositions and purchase quantity; identification of animal treated; number of treated, diagnose contents and medicine dosage; starting and ending date of treatment and management method; the earliest date of selling animals or their products.
- g.For livestock and poultry cultivation farms, details of all feeds shall be recorded, including varieties, composition and origin, etc.;
- h.Processing records, including raw materials purchase, processing, packaging, labeling, storage and transport;
- i.Records of pest control, product processing and storage, and cleaning of transport facilities;
- j.Inventory records of raw materials and products, and all invoices of purchase and selling;

k.Management of labels and batch numbers.

#### 4.3 Resource management

Organic product producer and processor shall have not only the resources matching the scale and technology of organic production and processing, but also the human resources conforming to the operation, and shall provide training and keep related records.

4.3.1 The managers of organic production and processing shall have the following conditions:

- a.One of the major responsible persons of the unit;
- b.Be aware of related national laws, regulations and requirements;
- c.Be aware of the requirements of GB/T 19630.1-GB/T 19630.4;
- d.Having technical knowledge or experiences of more than 5 year in agricultural production and (or) processing;
- e.Be familiar with the organic production and processing management system and production and (or) processing processes of the unit.

4.3.2 Internal inspectors shall be furnished with the following conditions:

- a.Be aware of related national laws, regulations and requirements;
- b.Relatively independent to the inspection object;
- c.Be familiar with and aware of the requirements of GB/T 19630.1-GB/T 19630.4;
- d.Having technical knowledge or experiences of more than 3 year in agricultural production and (or) processing;
- e.Be familiar with the organic production, processing and management system and production and (or) processing processes of the unit.

#### 4.4 Internal inspection

4.4.1 Internal inspection system shall be established to guarantee the organic production/processing management system and production process conforming to GB/T 19630.1-GB/T 19630.3.

4.4.2 Internal inspection shall carried out by internal inspector.

4.4.3 The responsibility of internal inspector is:

- a.Cooperate with the inspection and certification by certification authorities;
- b.Examine the quality management system of the enterprise in comparison with this part and put forward suggestions for modification of any contents violating this part;
- c.Confirm the overall process of the tracing system of the enterprise, and set his signature;
- d.Submit internal inspection report to certification authorities.

#### 4.5 Tracing system

To ensure the integrality of organic production, organic producers and processors shall establish complete tracing system, keep detailed records for retrospecting the overall process of actual production (such as land plot maps, farming activity records, processing records, storage records, inventory records and sales records, etc.) and traceable production batch number system.

#### 4.6 Continuous improvement

Make use of correction and preventive measures to continuously improve the effectiveness of organic production and processing management system and promote the healthy development of organic production and processing, so as to eliminate any factor not conforming, or potentially not conforming, to organic production and processing. Organic producers and processors shall:

- a.Find the cause for the nonconformity;
- b.Evaluate the requirements of measures to prevent the recurrence of the nonconformity;
- c.Determine and implement necessary measures;

- d. Make records of the results of measures taken;
- e) Appraise the correction or preventive measures taken.